render it smooth before incorporating it with the ointment. Too great stress cannot be laid on the painlessness of the drug. A 10 per cent. solution dropped in the eye hardly produces a sensation of warmth. To sum up, this drug has decided gonococcidal powers; it has a decided effect in reducing and allaying the inflammation of the disease; it can be used safely in almost any strength and at any stage of the disease; the injection can be repeated almost as frequently as the fancy of the physician dictates; the author has not seen any unpleasant symptoms due to the use of the drug and believes it to be one of the most valuable remedies given to the profession in recent years.

## THERAPEUTICS.

UNDER THE CHARGE OF
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**Antagonism of Morphine and Cocaine and the Employment of Cocaine in Morphine-poisoning.**—DR. EDWARD T. REICHERT, in a lengthy contribution on this subject, concludes as follows: 1. That the antagonistic actions between morphine and cocaine are of a powerful and widespread character, extending to almost every function involved, and are, therefore of such a character as to justify the conclusion that one may be regarded as meeting the important indications of a successful antagonist to the other. 2. That the only important synergistic actions are as excitomotors and their tendencies in some individuals to cause syncope. 3. That cocaine is not only sufficiently powerful to successfully antagonize the profound depressant actions of morphine upon general metabolism and body temperature, but as a whole is more powerful, both relatively and absolutely, in morphinized than in normal dogs. 4. That the increase in heat production caused by cocaine is due in part to a direct excitation of general metabolic activity, chiefly by motor excitement; and that even in the absence of muscular excitement cocaine may fully counteract the morphine depression. 5. That the effects caused by a given dose of cocaine per unit of body-weight vary in intensity within wide limits. 6. That the changes in body temperature following the injection of cocaine are, with few exceptions, closely related quantitatively and qualitatively to the changes in general metabolism, and are, therefore, a fairly reliable index of the intensity of the cocaine actions —in other words, of the extent to which the cocaine is counteracting or superseding the depressant actions of morphine. 7. That the temperature coefficients in normal and morphinized dogs after cocaine are practically identical, showing that morphine does not exert any specific actions on heat dissipation which interfere with the typical temperature-raising action of the cocaine. 8. That the typical cocaine effects may be delayed in the morphinized animal, and then appear with marked intensity, as shown by the increase of heat production, body temperature, and by motor excitation at a time when in normal animals they are lessening rapidly. Under such conditions the dangers of morphine-poisoning may be superseded by those of cocaine-poisoning. 9. That owing to a coexistent paralytic-convulsant state in the morphinized animal the administration of cocaine or other powerful excitomotor may develop or intensify the convulsant moiety, and thus render a non-lethal dose of the morphine lethal, or hasten death when the dose is lethal. In man the convulsant element is almost without exception so unimportant that there is probably little or no danger of this kind except after unnecessarily large doses of the excitomotor, or in exceptional individuals in whom the excitomotor action of the morphine is marked. 10. That the value of cocaine in morphine-poisoning probably depends chiefly upon the extent to which it antagonizes the depressant actions of morphine upon general metabolism and body temperature. 11. That the power of cocaine as a respiratory stimulant depends almost solely upon its action upon the heat mechanism. 12. That owing to the tendency of cocaine to cause syncope in certain individuals, to its excitomotor action, to the marked variability in the intensity of the effects caused by a given dose per kilo to the body-weight, to the occasional delay or latency in the typical actions of cocaine in morphinized animals, and to the fact of the greater value of small to moderate doses in morphinized dogs, it should be administered in morphine poisoning in man in small doses cautiously repeated.—*Therapeutic Gazette*, 1902, vol. xxvi., pp. 462, 518.

**Camphor and the Morphine Disease.**—DR. J. HOFMANN says that in healthy persons it has been demonstrated that camphor is a strong heart muscle stimulant, and that it causes an increase of blood pressure. In the initial action of morphine a directly reverse action takes place, whereas in the *habitué* stimulation is the usual result. When the morphine is withdrawn from the fiend, dilatation of the heart, with fluttering, takes place; this disappears on resuming the alkaloid. The author claims that this cardiac sensation is a vital one for the well feeling of the individual, and he believes that camphor used at such a time enables the patient to regain this sense of equilibrium. He details the history of a patient, a physician, who kept an accurate record of his sensations, for whom he recommended decreasing doses, by hypodermic injection, of morphine, and slightly increasing doses of camphor by the mouth on the advent of the patient's "abstinence" symptoms. Full tables of the progress of the case are given. Validol (a valeric acid menthol ester) was used as an adjuvant to the camphor.—*Therapeutische Monatshefte*, 1902, vol. xvi., p.360.

**A Fake Morphine Cure.**—DR. O. EMMERICH reports on a new cure for morphine that has appeared in the European market. Inasmuch as it has come to America, its composition as determined by the author and others should be known. It is termed "antimorphine," and is advertised as a new remedy containing no morphine, and useful for the treatment of patients at home, "without a doctor." He found that the remedy contained large quantities of morphine, and his analysis was confirmed by the chemists of a large manufacturing house. They reported that the remedy contained 1.4 per cent. of anhydrous morphine, or the equivalent of the hydrochloride of 1.84 per cent.—*Deutsche medicinische Wochenschrift*, 1902, vol. xxviii., p. 584.

**Arsenic in the Treatment of Phthisis.**—Dr. H. Cybulski has been using sodium arsenate in the treatment of phthisis, with good results. He administers it hypodermically, in the following solution: Sodium arsenate, 3 grains; carbolic acid (½ per cent.), 5 drachms; 1½ minims is to be injected at one time once per diem, at body temperature. This dose is doubled every second day until 15 minims are reached. In his work, which has now extended over a number of years, as a rule twenty injections were used serially. If improvement were noted, two to three weeks were permitted to elapse and the injections renewed. The signs of improvement were increased in the body-weight and appetite, reduction of temperature, and diminution of the night-sweats. The intestinal symptoms were not affected. Diarrhœa, an uncomfortable accompaniment of arsenical medication when given by the mouth, was absent. The subjective conditions were helped. The effect of the drug on the lungs is *nil*, he thinks.—*Münchener medicinische Wochenschrift*, 1902, vol. xlix., p. 1393.

**The Diphtheria Serum Question.**—Professor Kassowitz returns to this subject in a second paper, in which he reiterates his former claims, and endeavors by means of charts and statistical studies to maintain his position that the diphtheria serum is of little if any service.—*Therapeutische Monatshefte*, 1902, vol. xvi., p. 499.

**A Case of Poisoning from Pennyroyal.**—Dr. G. W. Holland reports a case of poisoning from this drug. The patient, a married woman, aged twenty-four years, was very desirous of avoiding pregnancy, and having gone a week beyond her usual period without any appearance of the menstrual flow, applied for a prescription to "bring on the flow." Oil of pennyroyal was prescribed. At 3 o'clock in the afternoon she took seven drops, without result. The dose was repeated at 6 o'clock, with no better success. At 9 o'clock, just before retiring, she swallowed about half a teaspoonful, and soon after fell asleep. She awoke in about an hour, complaining of great dizziness and nausea. Shortly after she vomited and complained of cramps and stiffness of the extremities. She lost consciousness, and was seized with violent tonic contraction of all the muscles, opisthotonos being well marked. The spasm lasted only a few minutes, and after incoherent talking and tossing for about half an hour the toxic symptoms began to subside, and consciousness was regained. On the arrival of the physician she complained of great weakness, cramps in the stomach, and a slight desire to go to stool. The pulse was 108 and feeble. Respiration and pupils were normal, and as the toxic symptoms were subsiding the author gave nothing, and merely watched the course of the symptoms. The following morning the patient was able to attend to her regular duties. The desired effect of bringing on the flow was not accomplished. The toxic dose in this case was half a drachm, and from the symptoms which were produced it is evident that the drug should be administered with great caution.—*Virginia Medical Semi-Monthly*, 1902; vol. vii., p. 319.

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**Treatment of Typhoid Fever.**—DR. FRANCOIS BOUCHARD gives the results of a detailed study of intestinal antisepsis in the treatment of typhoid fever after the method of Teissier. In 1890 this author described his method as follows: (1) Morning and evening a capsule of naphthol, 7 grains, and 4 grains of bismuth salicylate; (2) four cold enemata a day, to encourage diuresis; (3) following the afternoon enema, an enema of 1 drachm of extract of cinchona and 15 grains of quinine sulphate, dissolved in an infusion of valerian; this is used as antithermic and tonic; (4) the diet is liquid—a little milk, ten ounces of white wine, broths, etc. As a result of this method in 151 patients treated during twelve years the statistics showed a mortality of 4.63 per 100. He believes that the temperature, the abdominal and digestive symptoms, and the general condition are all much improved. Convalescence is shorter, and complications, particularly the intestinal complications, are much rarer. The effects of the treatment commence to show only on the fourth day.—*Thèse de Lyon*, 1902, No. 177.

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**Impermeability of the Lung for Ammonia.**—DR. R. MAGNUS determined to test the permeability of the lung for this gas. By intravenous injection minute doses of ammonia cause the most intense irritation of respiration, convulsions, and disturbances of circulation and of the central nervous system. The statement of Knoll that in tracheotomized and vagotomized animals the long-continued inhalation of ammonia is harmless, seems, in the light of these facts, so astonishing that the following test was made: Tracheotomy was performed on a rabbit after the vagi had been cut, and the animal allowed to inhale air saturated with ammonia. No constitutional symptoms, only local irritation of the mucous membranes followed, while if sulphuretted hydrogen was substituted for the ammonia, death occurred in fifteen seconds. The experiment was then modified so that ammonia was injected into the veins and the expired air passed into Nessler's reagent, yet in no instance was a precipitate obtained, despite the fact that the blood, on autopsy, had a bright-red color and smelt strongly of ammonia. The experiment was then repeated by injecting directly into the pulmonary artery, with the same result. If, however, artificial respiration were kept up after death, the reagent soon became cloudy. The experiments showed that the impermeability is a property of the living tissues.—*Archiv für Experimental Pathologie und Pharmakologie*, 1902, Band xlviii., p. 100.

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**Affinity of Carbonic Oxide for Hæmoglobin.**—DR. G. HUFFNER says that if hæmoglobin is exposed to a mixture of carbonic oxide and oxygen it will combine with both gases; but since the affinity of the substance for carbonic oxide is much greater than for oxygen, even small amounts of the former present in the atmosphere will render a large percentage of the blood unfit for oxygenation. He has constructed a table of percentages, from which it is evident that with but 0.05 per cent. of carbonic oxide in the air as much as 27 per cent. of the hæmoglobin present is seized upon by the poisonous gas.—*Archiv für Experimental Pathologie und Pharmakologie*, 1902, Band xlviii., p. 87.

## GYNECOLOGY.

UNDER THE CHARGE OF

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ASSISTED BY

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**Laparotomy for Adherent Retroflexion during Pregnancy.**—DOLERIS (*La Gynécologie*, June, 1902) treats this condition by opening the abdomen, separating adhesions, and shortening the round ligaments. He reports a successful case in which the patient, who was in the third month of pregnancy at the time of the operation, was delivered easily at full term, the uterus remaining in its normal position after involution had occurred.

**Lymphangiectasis of the Vulva.**—DURET (*Journal des Sciences Méd. de Lille*, 1902, No. 5) believes that there is a form of this disease which is due to streptococcus infection as well as to filaria. The superficial variety affects principally the external genitals and lower limbs, and is usually accompanied by œdema and elephantiasis of the skin; small vesicles appear, which may open spontaneously, causing a copious discharge of lymph, which may be so profuse as to lead to profound anæmia, which, however, yields to constitutional treatment.

**Premature Menopause.**—ADDINSELL (*British Medical Journal*, May 17, 1902) reports the case of a young woman, aged twenty-six years, whose menstruation had been entirely normal up to the time of her marriage. During the wedding journey she was under great excitement at the time when her monthly flow was due. It had never appeared since. When examined six years later she was in good health, although she suffered from flushes of heat, which occurred every few weeks. Her uterus had undergone senile atrophy, the sound entering to the depth of an inch. The ovaries were apparently normal. The patient stated that her sexual desires were preserved, and that her breasts sometimes became swollen and tender.

**Structure of the Senile Uterus.**—VERRONI (*Annali di Ostetricia et di Ginecologia*, 1901, No. 7) presents the results of his studies of twenty-eight normal uteri removed from women between the ages of sixty and ninety-two. In most of the specimens the mucous and submucous layers had undergone atrophy, together with the glands; in others, the submucous layer was